

IN THE SPECIFICATION:

Please amend the paragraph on page 13, lines 14-25 as follows:

As shown in Figures 1 and 2, the flow of gases exit the chamber 4 and pass out from the humidification system 1 to a heated delivery circuit 6 and to a patient 22. The heated delivery circuit 6 is a plastics conduit having a heated wire 21 extending through it, for example, such as that disclosed in any one of United States patent application Serial Nos. 10/270,805 and 10/298,099, both NZ516387, NZ514314 and NZ521017, all of Fisher & Paykel Healthcare Limited, the contents of which are incorporated herein. The delivery conduit has wires extruded within the tubing walls. The conduit is extruded from an appropriate plastics material, such as a flexible polymer. The conduit has ridges or ribs extending from the surface of the conduit wall. Each rib extends towards the centre of the conduit and has a heating element, usually a wire that is embedded along the conduit's length. The heater wires may be made from copper, copper alloy or other appropriate electricity conducting material, such as a PTC heater. The heater wire is embedded within the ribs of the conduit by co-extrusion at the time the polymer conduit is extruded.

Please amend the paragraph on page 15, lines 4-16 as follows:

The humidification system of the present invention includes within the conduit heater plate controller 18 a delivery conduit overheating detection system, such as that disclosed in NZ516387 United States patent application Serial No. 10/270,805 of Fisher & Paykel Healthcare Limited, the contents of which are herein incorporated. Such a detection system for the heating element includes a method of detecting conduit overheating where, when the conduit is hot the current drawn by the heating element within the conduit exceeds a predetermined limit. The detection system ensures that the humidifier and conduit can be

switched to a safe mode then back to an operating mode once the temperature of the heating element within the conduit has reduced to safe levels. The device comprises a sensor to detect the current in the heating element and controller that implements an algorithm to reduce the current in the heating element to a safe current region. If the conduit comprises two limbs the sensor detects the currents in each of the limbs determines the difference between these currents and if the difference approaches a predetermined limit then the power to each of the heating elements is reduced.

Please amend the paragraph on page 15, lines 18-28 as follows:

In the preferred form of the humidification system of the present invention the delivery conduit 6 is connected to the output port 11 by way of an electro pneumatic connector, such as that described in ~~NZ519374~~ United States patent application Serial No. 10/452,448 of Fisher & Paykel Healthcare Limited, the contents of which is herein incorporated. In particular a connector of this type is utilised where the conduit has a heating element or electrical wire extending within, throughout and about it. The conduit is connected to the humidification chamber via a connector that provides both an electrical 19 and a pneumatic 20 coupling. In Figure 4, only the chamber 4 side of a single port electro pneumatic connector is shown. In this form the single port connector is generally tubular and has a male and female portion where the pneumatic coupling is by a threaded, sliding collar or bayonet type connection that has an integral electrical port that provides power to the wire in the conduit.